WHAT IS CLAIMED IS:

1. A real-image variable-magnification viewfinder comprising:

an objective optical system, having a positive optical power, for forming a real image in an optical path;

an eyepiece optical system, having a positive optical power, for transmitting the real image formed by the objective optical system to a pupil of an observer; and

an erecting optical system, disposed in the optical path, for inverting the real image formed by the objective optical system,

wherein the objective optical system includes three lens units arranged in the following order, from an object side of the objective optical system:

a first lens unit having a positive optical power;

a second lens unit having a negative optical power; and

a third lens unit having a positive optical power,

wherein, as zooming is performed from a wide-angle end to a telephoto end, at least one of the second lens unit and third lens unit is moved in such a way that the second lens unit and third lens unit come closer to each other, and the following conditional formulae are fulfilled:

$$-0.75 < m_{2W} < -0.3$$

$$-2 < m_{2T} < -1.05$$

$$-0.75 < m_{3W} < -0.3$$

$$-2 < m_{3T} < -1.05$$

$$L_2 > L_3$$

where

m_{2W} represents a lateral magnification of the second lens unit at the wide-angle end;

m_{2T} represents a lateral magnification of the second lens unit at the telephoto end;

m_{3W} represents a lateral magnification of the third lens unit at the wide-angle end;

m_{3T} represents a lateral magnification of the third lens unit at the telephoto end;

L_2 represents a movement distance of the second lens unit over an entire zoom range; and

L_3 represents a movement distance of the third lens unit over the entire zoom range.

2. A real-image variable-magnification viewfinder as claimed in claim 1, wherein, when zooming is performed, the second lens unit is moved and the third lens unit is kept stationary.

3. A real-image variable-magnification viewfinder as claimed in claim 1, wherein in a portion of a zoom range, the second lens unit is kept stationary and the third lens unit is moved.

4. A real-image variable-magnification viewfinder as claimed in claim 1, wherein the erecting optical system comprises two prisms.

5. A real-image variable-magnification viewfinder comprising:

an objective optical system, having a positive optical power, for forming a real image in an optical path;

an eyepiece optical system, having a positive optical power, for transmitting the real image formed by the objective optical system to a pupil of an observer; and

an erecting optical system, disposed in the optical path, for inverting the real image formed by the objective optical system,

wherein the objective optical system includes four lens units arranged in the following order, from an object side of the objective optical system:

a first lens unit having a positive optical power;

a second lens unit having a negative optical power;

a third lens unit having a positive optical power; and

a fourth lens unit,

wherein, as zooming is performed from a wide-angle end to a telephoto end, at least one of the second lens unit and the third lens unit is moved in such a way that the second lens unit and the third lens unit come closer to each other, and the following

conditional formulae are fulfilled:

$$-0.75 < m_{2W} < -0.3$$

$$-2 < m_{2T} < -1.05$$

$$-0.75 < m_{3W} < -0.3$$

$$-2 < m_{3T} < -1.05$$

$$L_2 > L_3$$

$$-0.1 < PW_4 < 0.04$$

where

m_{2W} represents a lateral magnification of the second lens unit at the wide-angle end;

m_{2T} represents a lateral magnification of the second lens unit at the telephoto end;

m_{3W} represents a lateral magnification of the third lens unit at the wide-angle end;

m_{3T} represents a lateral magnification of the third lens unit at the telephoto end;

L_2 represents a movement distance of the second lens unit over an entire zoom range;

L_3 represents a movement distance of the third lens unit over the entire zoom range; and

PW_4 represents an optical power of the fourth lens unit.

6. A real-image variable-magnification viewfinder as claimed in claim 5, wherein, when zooming is performed, the second lens unit is moved and the third lens unit is kept stationary.

7. A real-image variable-magnification viewfinder as claimed in claim 5, wherein in a portion of the zoom range, the second lens unit is kept stationary, and the third lens unit is moved.

8. A real-image variable-magnification viewfinder as claimed in claim 5, wherein the erecting optical system comprises two prisms.

9. A real-image variable-magnification viewfinder as claimed in claim 5, wherein the fourth lens unit has a negative optical power.

10. A real-image variable-magnification viewfinder comprising:

an objective optical system, having a positive optical power, for forming a real image in an optical path;

an eyepiece optical system, having a positive optical power, for transmitting the real image formed by the objective optical system to a pupil of an observer; and

an erecting optical system, disposed in the optical path, for inverting the real image formed by the objective optical system,

wherein the objective optical system comprises four lens units arranged in the following order, from an object side of the objective optical system:

a first lens unit having a positive optical power;

a second lens unit having a negative optical power;

a third lens unit having a positive optical power; and

a fourth lens unit having a negative optical power,

wherein, as zooming is performed, the first lens unit, the second lens unit, and the third lens units are moved, and the following conditional formulae are fulfilled:

$$-0.95 < m_{2W} < -0.3$$

$$-3 < m_{2T} < -1.05$$

$$-0.95 < m_{34W} < -0.3$$

$$-2.6 < m_{34T} < -1.05$$

where

m_{2W} represents a lateral magnification of the second lens unit at a wide-angle end;

m_{2T} represents a lateral magnification of the second lens unit at a telephoto end;

m_{34W} represents a composite lateral magnification of the third lens unit and the fourth lens unit at the wide-angle end; and

m_{34T} represents a composite lateral magnification of the third lens unit and the fourth lens unit at the telephoto end.

11. A real-image variable-magnification viewfinder as claimed in claim 10, wherein the following conditional formula is additionally fulfilled:

$$M_f^{0.5} < M_2 < M_f^{0.8}$$

where

M_2 represents a zoom ratio, m_{2T} / m_{2W}, of the second lens unit; and

M_f represents a zoom ratio of an entire viewfinder.

12. A real-image variable-magnification viewfinder as claimed in claim 10, wherein the erecting optical system comprises two prisms.

13. A real-image variable-magnification viewfinder comprising:

an objective optical system, having a positive optical power, for forming a real image in an optical path;

an eyepiece optical system, having a positive optical power, for transmitting the real image formed by the objective optical system to a pupil of an observer; and

an erecting optical system, disposed in the optical path, for inverting the real image formed by the objective optical system,

wherein the objective optical system comprises three lens units arranged in the following order, from an object side of the objective optical system:

a first lens unit; and

at least two succeeding lens units,

wherein the first lens unit is moved to adjust dioptric power, and zooming is achieved by moving at least two of the succeeding lens units in such a way that magnification is variable within a range extending to both sides of unity magnification.